



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/092,245 | 03/06/2002 | John H. Wynne | MM2-114 | 9277 |

7590 11/17/2004

William L. Chapin
Law Offices of William L. Chapin
16791 Sea Witch Lane
Huntington Beach, CA 92649

EXAMINER

FLETCHER III, WILLIAM P

ART UNIT PAPER NUMBER

1762

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,245

Applicant(s)

WYNNE, JOHN H.

Examiner

William P. Fletcher III

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-86 is/are pending in the application.
- 4a) Of the above claim(s) 11-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44,47-59,62-66,70-72,80,81 and 83-86 is/are rejected.
- 7) ☒ Claim(s) 44,60,61,67-69 and 73-79 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other: Dictionary definition of "continuous".

DETAILED ACTION

Response to Amendment

1. Receipt of applicant's amendment and response, filed 6/12/2004, as well as the compliant listing of claims filed 9/7/2004, is acknowledged.

Election/Restrictions

2. The above-mentioned response cancels originally-filed process claims 1-10 and replaces them with new process claims 44-86. These new process claims are distinct from product (ink) claims 11-43 for at least the same reasons set-forth in the Office action mailed 3/15/2004.
3. Applicant's election with traverse is acknowledged. The traversal is on the ground(s) that "as stated repeatedly in the specification, applicant's ink never remains intact as a surface coating, and in fact, utilizes release agents in his ink composition and/or on the surface of an object to be imprinted to assure that the disclosed ink does not adhere so tightly to an object surface as to enable the dried ink film to remain adhered to the object surface." This is not found persuasive because the *prima facie* case for restriction is based upon whether or not the ink *can* be used in a materially different process. There is no evidence of record to indicate that, if left undisturbed, the ink film cannot remain adhered to or otherwise in contact with the substrate. Further, the ink as claimed can be used in a process in which it removed from the substrate by other than peeling; including, but not limited to, dissolving, washing, or scraping.

The requirement is still deemed proper and is therefore made FINAL. Non-elected claims 11-43 remain withdrawn from consideration.

Response to Arguments

4. The rejections set-forth in the Office action mailed 3/15/2004 are moot because applicant has canceled the claims under rejection. Ground of rejection for new claims 44-86 are set-forth later in this action. Applicant's relevant pre-emptive arguments regarding this claims are addressed below.

Applicant's arguments in the paragraph bridging pages 2 and 3 of the above-mentioned response are noted. The examiner disagrees with these arguments. Lopez explicitly teaches "painting the stencil, including the decorative cut-out portion" (1:52-53). Lopez defines stencil 40 and cut-out portion 42 (see Fig. 4). It is the examiner's position that this teaching is inclusive of forming a continuous (i.e., uninterrupted or unbroken in some fashion¹) layer over the openings and adjacent areas of the sheet, as defined in new claim 44. Applicant's arguments regarding the state of the art of stenciling are noted but are unsupported by evidence. Attorney argument cannot take the place of evidence in the record. MPEP 716.01(c)(II). Further, the examiner disagrees with applicant's suggestion that "all prior stenciling art...teaches the use of special stencil brushes which are designed to add very small amounts of paint, or add the paint sparingly in a very thin coating...". US 5,967,031 A (Gauss) teaches that it is common to apply paint to a stencil not just by using a brush or sponge, but by spraying or rolling as well (1:17-33). Lopez explicitly suggests brush, roller, or spray gun application of paint to the stencil (2:46-47). With respect to "stencil leakage," because Lopez emphasizes adhesion of the stencil to the substrate (2:21+) and at no point addresses "stencil leakage" — even when using paint application means that do not involve "special brushes which are designed to add very small

¹ Webster's II New Riverside Dictionary, © 1988 by Houghton Mifflin Company, page 305, attached.

Art Unit: 1762

amounts of paint, or add the paint sparingly in a very thin coating” — it is the fair teaching of this reference that “stencil leakage” does not occur.

Applicant’s arguments at 3:4-23 of the above-mentioned response, with respect to peeling *en masse*, are noted. The examiner disagrees with these arguments. As noted above, the disclosure of Lopez is inclusive of forming a continuous (i.e., uninterrupted or unbroken in some fashion) layer over the openings and adjacent areas of the sheet. Utilizing a peelable ink with the stencil (as would be the case in a combination of JP ‘039 with Lopez) inherently results in removal *en masse* of the stencil and the peelable film.

Claim Objections

5. Claim 44 is objected to because of the following informalities:

a. At 5:4, “impact” should, apparently, read “impart.”

and

b. At 5:11, “solutrillized” should, apparently, read “solubilized.”

Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 44, 47-59, 62-66, 70-72, 80, 81, and 83-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-26039 A (reference made to the English-language**

translation provided by the USPTO Translations Branch) in view of Lopez (US 4,129,669 A).

The 039 reference teaches a process for dyeing the surface of an object in which: a semi-liquid, peelable ink is applied to a portion of the surface of the object; sufficient time is allowed for the solvent to evaporate from the ink, thereby forming a solid film peelable from the surface of the object; and the solid film is peeled from the surface of the object leaving the markings behind (abstract; claim 1; 1:¶2; 4:1-2; and 5:7-6:11). The ink includes a solvent, a dye solubilized therein, and a film-forming substance (4:10-13; 4:18-5:6; and Examples).

This reference states: "the dye...is transferred uniformly onto the substrate" (4:20-5:1); and "plastic, wooden, and leather products in particular can be dyed with a colorfast color" (4:7-9). Although this reference does not explicitly state that the dye penetrates beneath the surface of the object, as claimed, it is the examiner's position that this is an inherent feature of the process of this reference. US 1,605,041 A; US 3,830,626 A; and US 3,928,677 A; are cited solely in support of this position, teaching that dyeing of leather, plastic, and wooden objects, respectively, is achieved by penetration of dye into the pores of these objects.

This reference does not explicitly teach the stencil, ink application using the stencil, or peeling of the stencil and ink film *en masse*.

The 039 reference teaches applying the peelable ink to portions of the substrate in a desired pattern (paragraph bridging pages 3-4). Lopez teaches that a coating composition may be selectively applied to the surface of an object (including wood, leather, and plastic) utilizing a stencil. The rear surface of the stencil is conformed to the surface of the object (2:9-20 and 51-63). The seal between the surface of the surface of the object and the stencil is fluid-tight insofar

as it is air-tight (2:9-20). Lopez further teaches “painting the stencil, including the decorative cut-out portion” (1:52-53). Lopez defines stencil **40** and cut-out portion **42** (see Fig. 4). It is the examiner’s position that this teaching is inclusive of forming a continuous (i.e., uninterrupted or unbroken in some fashion²) layer over the openings and adjacent areas of the sheet. Lopez further teaches removing the stencil from the substrate after application of application of the coating material (1:52-54).

It would have been obvious to one of ordinary skill in the art to modify the process of the 039 reference so as to utilize the mask of Lopez, according to the process of Lopez, so as to apply the peelable ink of the 039 reference in a desired pattern. One of ordinary skill in the art would have been motivated to do so by the desire and expectation of successfully applying the ink to the surface of the object to form indicia in a variety of desirable patterns.

Because this combination is inclusive of forming a continuous coating of the peelable ink over the stencil and substrate, it is inherent feature that, in performing the step of removing the stencil, the stencil and peelable ink are removed *en masse*.

While neither of these references explicitly state that the markings are abrasion and wear resistant, these are physical properties of the resultant dyed substrate. Since this combination of references teaches all of applicant’s claimed dye composition and process steps, it is the examiner’s position that, unless some essential process step(s) is/are not recited in the claims, the dyed substrate of this process possesses abrasion and wear resistance. Additionally, applicant, at page 5, lines 12-15 of the spec., discloses that the penetration of the markings beneath the surface of the object is responsible for the abrasion and wear resistance thereof. Consequently,

² See above.

since it has been established above that such penetration is an inherent feature of this combination of references, abrasion and wear resistance are inherent features as well.

With specific respect to claim 47, the 039 reference teaches several examples of soluble film-forming polymers (4:18-5:6).

With specific respect to claims 49 and 50, the 039 reference teaches that the object may be plastic (4:3-9). It is the examiner's position that in teaching "plastic" objects, the 039 reference is inclusive of polymeric and thermoplastic objects.

With specific respect to claims 51 and 52, neither of these references teaches a specific film thickness. It is the examiner's position that film thickness is a result-effective variable effecting film coverage, drying time, and, consequently, overall processing time. Consequently, absent evidence of unexpected results demonstrating the criticality of the claimed film thickness, it would have been obvious to one of ordinary skill in the art to optimize film thickness by routine experimentation. See MPEP 2144.05.

With specific respect to claim 53, since this combination of references teaches all of applicant's claimed dye composition and process steps, it is the examiner's position that, unless some essential process step(s) is/are not recited in the claims, the solid film inherently has the properties recited in this claim.

With specific respect to claims 57, 58, and 71, the 039 reference teaches polymeric resins (see examples).

With specific respect to claims 59, 72, 85, and 86, the 039 reference teaches that the peelable ink may contain a releasing agent (5:top).

With specific respect to claim 62, neither of these references teaches a specific weight percentage of dye in the ink. It is the examiner's position that this percentage is a result-effective variable effecting the degree to which the substrate is dyed. Consequently, absent evidence of unexpected results demonstrating the criticality of the claimed film thickness, it would have been obvious to one of ordinary skill in the art to optimize this percentage by routine experimentation. See MPEP 2144.05.

With specific respect to claim 63, the 039 reference teaches that the film-forming substance comprises from 5 to 60 percent by weight of the ink (4:penultimate paragraph).

With specific respect to claim 64, since this combination of references teaches all of applicant's claimed dye composition and process steps, it is the examiner's position that, unless some essential process step(s) is/are not recited in the claims, the solid film inherently has the properties recited in this claim.

With specific respect to claim 65, the 039 reference teaches that the ink composition may contain a plasticizer (5:top).

With specific respect to claim 66, the 039 reference teaches that the ink composition may be aqueous (5:top).

With specific respect to claims 70 and 81, the 039 reference teaches that the solvent may be isopropanol (examples).

With specific respect to claim 80, neither of these references teaches a specific amounts of the ink components. It is the examiner's position that these amounts are result-effective variables effecting coating properties of the ink such as viscosity and intensity of dye color. Consequently, absent evidence of unexpected results demonstrating the criticality of the claimed

proportions, it would have been obvious to one of ordinary skill in the art to optimize these by routine experimentation. See MPEP 2144.05.

With specific respect to claim 83, the 039 reference explicitly teaches an acidic dye (4:second full paragraph).

With specific respect to claim 84, the 039 reference teaches various vinyl polymers (pages 4 and 5, as well as examples).

8. **Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-26039 A (reference made to the English-language translation provided by the USPTO Translations Branch) in view of Lopez (US 4,129,669 A), as applied to 44 above, in further view of *Hawley's Condensed Chemical Dictionary, 12th Edition*.**

With respect to claim 45, as noted above, it would have been obvious to one of ordinary skill in the art to utilize the stencil of Lopez as the mask. The seal between the surface of the object and the stencil is fluid-tight insofar as it is air-tight (2:9-20). While Lopez does teach that the stencil is adhesive-backed, the reference does not explicitly state that the adhesive is a pressure-sensitive adhesive. Lopez teaches: "The adhesive mass rear surface can be a rubber-resin base or some similar material..." (2:9-20). Hawley's teaches that the class of rubber-based adhesives include pressure-sensitive adhesives. It would have been obvious to one of ordinary skill in the art to modify the process of the 039 reference in view of Lopez so as to utilize, as the rubber-resin base adhesive, as pressure-sensitive adhesive. One of ordinary skill in the art would have been motivated to do so by the desire and expectation of successfully adhering the stencil to the surface of the object.

With respect to claim 46, since the 039 reference is silent with respect to substrate damage and does not disclose any particular precautions to avoid such damage, it is the examiner's position that such damage does not occur. Further, since the 039 reference teaches that the ink may be applied to paper products (4:3-9), like the stencil of Lopez, it is the examiner's position that the ink will tightly adhere thereto as well.

9. **Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 60-26039 A (reference made to the English-language translation provided by the USPTO Translations Branch) in view of Lopez (US 4,129,669 A), as applied to 80 above, in further view of Dien (US 4,717,390 A).**

Neither the 039 reference nor Lopez teach the dyes recited in this claim. As noted above, both the 039 reference and Lopez teach leather substrates. Dien teaches that sulphur dyes may be utilized to dye leather substrates (abstract). It would have been obvious to one of ordinary skill in the art to modify the process of the 039 reference in view of Lopez so as to utilize, as the dye, a sulphur dye as suggested by Dien. One of ordinary skill in the art would have been motivated to do so by the desire and expectation of successfully dyeing the substrates taught by the 039 reference and Lopez, including leather.

Allowable Subject Matter

10. Claims 60, 61, 67-69, and 73-79 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: The prior art neither teaches nor suggests the method of the independent claim further comprising the features recited in these claims.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Monday through Friday, 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WPF 11/12/2004
William P. Fletcher III
Examiner
Art Unit 1762

DRB
SHARVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1760